Complete Summary

GUIDELINE TITLE

Parameter on systemic conditions affected by periodontal diseases.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Periodontology. Parameter on systemic conditions affected by periodontal diseases. J Periodontol 2000 May; 71(5 Suppl): 880-3. [47 references]

COMPLETE SUMMARY CONTENT

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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES

SCOPE

DISEASE/CONDITION(S)

Systemic conditions affected by periodontal diseases, including:

- Diabetes mellitus
- Pregnancy
- Cardiovascular diseases

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness Evaluation Treatment

IDENTIFYING INFORMATION AND AVAILABILITY

CLINICAL SPECIALTY

Dentistry

INTENDED USERS

Dentists

GUIDELINE OBJECTIVE(S)

To provide a parameter on systemic conditions affected by periodontal diseases.

TARGET POPULATION

Individuals with systemic conditions affected by periodontal diseases.

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation

- 1. Comprehensive periodontal evaluation
- 2. Medical history
- 3. Referral to/consultation with other health care providers

Treatment

- 1. Periodontal therapy
- 2. Antibiotic therapy
- 3. Patient education/patient motivation

MAJOR OUTCOMES CONSIDERED

Efficacy of therapy, as noted by changes in:

- Gingival inflammation
- Probing depths
- Clinical attachment
- Plaque levels
- Acute periodontal infections

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources) Hand-searches of Published Literature (Secondary Sources) Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Approved by the Board of Trustees, American Academy of Periodontology, May 1999.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnosis

Patient Evaluation

1. A comprehensive periodontal evaluation should be performed as described in the Parameter on Comprehensive Periodontal Examination.

- 2. The medical history should be evaluated for existing systemic diseases or conditions, medications, and risk factors for systemic diseases.
- 3. Other health care providers may be consulted as indicated by the patient's systemic health status, periodontal condition, and proposed treatment. Any consultation should be documented.

Therapeutic Goals

The therapeutic goals are to diagnose periodontal infections which may impact on the patient's systemic health; to inform the patient of possible interactions between the patient's periodontal disease and systemic condition; and to establish periodontal health which may minimize potential negative influences of periodontal infections. Research and clinical experience indicate that periodontal infections may have an impact on the following diseases or conditions:

- Diabetes mellitus
- Pregnancy
- Cardiovascular diseases

Preliminary evidence suggests that periodontal infections may also be associated with pulmonary disease and other remote site infections.

Treatment Considerations

Diabetes Mellitus

Periodontitis may adversely affect glycemic control in diabetes. It may also be associated with an increased risk of cardiovascular complications associated with diabetes. Periodontal treatment, especially in patients with severe periodontitis and poorly controlled diabetes, may result in improvement in glycemic control. Treatment considerations for patients with diabetes mellitus include:

- 1. Diagnosis of the patient's periodontal condition.
- 2. Consideration of consultation with patient's physician to advise of the presence of periodontal infection and proposed treatment.
- 3. Consideration of diagnosis and duration of diabetes; level of glycemic control; medications and treatment history; and risk factors for periodontitis which may influence diabetic complications.
- 4. Education of the patient regarding the possible impact of periodontal infection on glycemic control.
- 5. Periodontal therapy and patient motivation to establish and maintain periodontal health. Consideration may be given to the use of systemic antibiotics in conjunction with mechanical therapy (see Parameter on Periodontitis Associated with Systemic Conditions).

Pregnancy

Women with periodontitis may have increased risk for pre-term low birth weight delivery. Treatment considerations for pregnant patients include:

1. Diagnosis of the patient's periodontal condition.

- 2. Consideration of consultation with patient's physician to advise of the presence of periodontal infection and proposed treatment.
- 3. Consideration of gestational period; status of pregnancy; and risk factors for periodontitis which may influence pregnancy outcomes.
- 4. Education of the patient regarding the possible impact of periodontal infection on pregnancy outcomes.
- 5. Periodontal therapy and patient motivation to establish and maintain periodontal health. (see Parameter on Periodontitis Associated with Systemic Conditions).

Cardiovascular Diseases

Coronary artery disease.

Individuals with periodontal disease may have significantly increased risk of coronary heart disease and related events such as angina pectoris and myocardial infarction. Periodontal pathogens may contribute to atherogenic changes and thromboembolic events in the coronary arteries. Similar processes may occur in other arteries. For example, periodontal disease may increase the risk of cerebral ischemia and non-hemorrhagic stroke.

Infective endocarditis.

While bacteremias may occur in individuals with a healthy periodontium, they may be intensified in patients with periodontitis. Treatment considerations for patients at risk for or with existing cardiovascular diseases include:

- 1. Diagnosis of the patient's periodontal condition.
- 2. Consideration of consultation with patient's physician to advise of the presence of periodontal infection and proposed treatment. The American Heart Association guidelines should be followed for patients at risk for infective endocarditis
- 3. Consideration of diagnosis and status of cardiovascular disease; treatment and medications; and risk factors for periodontitis which may influence coronary artery disease.
- 4. Education of the patient regarding the possible impact of periodontal infection on the cardiovascular system.
- 5. Periodontal therapy and patient motivation to establish and maintain periodontal health. (see Parameter on Periodontitis Associated with Systemic Conditions).

Outcomes Assessment

The desired outcome of therapy is to prevent adverse systemic consequences of existing periodontal infection via:

- 1. Knowledge of the patient's medical history and systemic status, the periodontal condition, and the possible interactions between oral and systemic health or disease
- 2. Reduction of clinically detectable plaque and periodontal pathogens to a level compatible with periodontal health.

- 3. Reduction of clinical signs of gingival inflammation
- 4. Reduction of probing depths
- 5. Stabilization or gain of clinical attachment
- 6. Control of acute periodontal infections
- 7. Addressing the risk factors for periodontal disease as they affect the systemic condition.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Diagnosis of periodontal infections that may impact a patients systemic health
- Provide information to a patient of possible interactions between periodontal disease and systemic conditions.
- Minimize potential negative influences of periodontal infections.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- 1. Each parameter should be considered in its entirety. It should be recognized that adherence to any parameter will not obviate all complications or post-care problems in periodontal therapy. A parameter should not be deemed inclusive of all methods of care or exclusive of treatment appropriately directed to obtain the same results. It should also be noted that these parameters summarize patient evaluation and treatment procedures which have been presented in more detail in the medical and dental literature.
- 2. It is important to emphasize that the final judgment regarding the care for any given patient must be determined by the dentist. The fact that dental treatment varies from a practice parameter does not of itself establish that a dentist has not met the required standard of care. Ultimately, it is the dentist who must determine the appropriate course of treatment to provide a reasonable outcome for the patient. It is the dentist, together with the patient, who has the final responsibility for making decisions about therapeutic options.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better Living with Illness

IOM DOMAIN

Effectiveness Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Academy of Periodontology. Parameter on systemic conditions affected by periodontal diseases. J Periodontol 2000 May; 71(5 Suppl): 880-3. [47 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 May

GUIDELINE DEVELOPER(S)

American Academy of Periodontology - Professional Association

SOURCE(S) OF FUNDING

American Academy of Periodontology

GUI DELI NE COMMITTEE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

The complete set (13 parameters) of the American Academy of Periodontology Parameters of Care can be downloaded from the Academy's Web site. An Adobe Acrobat Reader is required to download the publication.

To access the Academy's Web site, go to www.perio.org. To access a copy of the Parameters of Care, go to www.perio.org/resources-products/pdf/parameters.pdf.

AVAILABILITY OF COMPANION DOCUMENTS

This is one of 13 practice parameters available in the American Academy of Periodontology Parameters of Care. This journal supplement includes a Foreword and an Overview.

To access the Academy's Web site, go to www.perio.org. To access a copy of the Parameters of Care, go to www.perio.org/resources-products/pdf/parameters.pdf.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on October 12, 2000. The information was verified by the guideline developer on October 17, 2000.

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